

invention. Such other embodiments may be readily devised by those skilled in the art without departing from the spirit or scope of this invention and it is our intent that they are deemed to be within the scope of this invention.

## Claims

[c1]

1. A system for communication between electronic devices comprising:
  - (A) a power line interface;
  - (B) an analog front-end processor electrically connected to said power line interface;
  - (C) a modem/phone line physical layer digital processor electrically connected to said analog front-end processor;
  - (D) a back end interface electrically connected to said modem/phone line physical layer digital processor; and
  - (E) a computation device in electronic communication with said back end interface.

[c2]

2. A method for communicating information from a first computation device to a second computation device, comprising:
  - (A) reading data from computer memory;
  - (B) encrypting said read data;
  - (C) checking if a channel medium is clear;
  - (D) fetching said encrypted data;
  - (E) error encoding said fetched encrypted data;
  - (F) modulating said error encoded data;
  - (G) mapping out bad tones for transmit of error-encoded data;
  - (H) filtering said error encoded data;

- (I)amplifying said filtered data; and
- (J)coupling said amplified data to an AC power line.

[c3]

3.A method for communicating information from a first computation device to a second computation device, comprising:

- (A)receiving a power line communication signal;
- (B)amplifying said received power line communication signal;
- (C)filtering said amplified signal;
- (D)converting said amplified signal to data;
- (E)demodulating said data;
- (F)forward error decoding said demodulated data;
- (G)sending said decoded data to a computer memory; and
- (H)decrypting said data in computer memory.

[c4]

4.A system for communicating between a computer device to a second computer device, comprising:

- (A)a power line communication channel;
- (B)a digital processor in electrical communication with said power line communication channel, wherein said digital processor employs a HomePNA protocol; and
- (C)an interface between said digital processor with a computer device, said computer device further encrypting data for transmit across said power line communication channel.

## Abstract of Disclosure

[0038] A new method and system for adapting standard home network protocol communication signals for communication between networked computation devices over the AC power line is provided. This invention provides improvements to the standard home network protocol required for use over the AC power line, including such features as encrypting, signal amplification and improved signal to noise ratio.